

REMARKS

This responds to the Office Action mailed on 12 September 2006.

Claims 1, 5, 8, 11, 23, 30, 66, 69, 72, 73, 76, and 77 are amended, no claims are canceled, and no claims are added; as a result, claims 1-79 are now pending in this application. The amendments to the claims are fully supported by the specification as originally filed. No new matter is introduced. Applicant respectfully requests reconsideration of the above-identified application in view of the amendments above and the remarks that follow.

Support for the amendments to the claims may be found in the specification, for example, on page 10, lines 3-9.

In the Specification

The specification is amended to update the status of U.S. Application Serial No. 10/117, 041, from which the instant application is a divisional application. No new matter is introduced.

The specification is amended with the paragraphs beginning on page 5, line 15 – page 6, line 7, including the heading Summary of the Invention, but before the heading Brief Description of the Drawings, being deleted. The specification is amended with paragraphs inserted beginning on page 8, line 4 before the original paragraphs beginning on page 8, line 5. The inserted paragraphs are from the specification as originally filed beginning on page 5, line 19 – page 6, line 7. No new matter is introduced.

First §102 Rejection of the Claims

Claims 1, 8, 23, and 30-35 were rejected under 35 U.S.C. § 102(e) for anticipation by Edelstein et al. (U.S. 6,181,012). Applicant traverses these grounds of rejection of these claims.

Applicant reserves the right to swear behind Edelstein et al. (hereafter Edelstein) at a later date.

Applicant cannot find in Edelstein a disclosure, a teaching, or a suggestion of a barrier/adhesion layer that includes zirconium or hafnium as recited in amended claim 1. Therefore, Applicant submits that Edelstein does not anticipate claim 1 and that claim 1 is patentable over Edelstein.

For at least reasons similar to those stated above for claim 1, independent claims 8, 23, and 30 are patentable over Edelstein. Claims 31-35 depend on claim 30. Thus, Applicant submits that claims 31-35 are patentable over Edelstein for at least the reasons stated herein.

Applicant respectfully requests withdrawal of these rejections of claims 1, 8, 23, and 30-35, and reconsideration and allowance of these claims.

Second §102 Rejection of the Claims

Claims 1-3, 5-9, 11-13, and 23-28 were rejected under 35 U.S.C. § 102(e) for anticipation by Havemann et al. (U.S. 6,538,849). Applicant traverses these grounds of rejection of these claims.

Applicant reserves the right to swear behind Havemann et al. (hereafter Havemann) at a later date.

Applicant cannot find in Havemann a disclosure, a teaching, or a suggestion of a barrier/adhesion layer that includes zirconium or hafnium as recited in amended claim 1. Therefore, Applicant submits that Havemann does not anticipate claim 1 and that claim 1 is patentable over Havemann.

For at least reasons similar to those stated above for claim 1, independent claims 8 and 23 are patentable over Havemann. Further, Applicant submits that claims dependent from claims 1, 8, and 23 are patentable over Havemann for at least the reasons stated herein.

Applicant respectfully requests withdrawal of these rejections of claims 1-3, 5-9, 11-13, and 23-28, and reconsideration and allowance of these claims.

§103 Rejection of the Claims

Claims 4, 10, and 66-70 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Havemann et al. (U.S. 6,538,849). Applicant traverses these grounds of rejection of these claims.

Applicant does not agree with the grounds of rejection of these claims. However, Applicant has limited the discussion of the traversal of the Office Action rejections to such discussion as is necessary to efficiently expedite the prosecution of the abovementioned

application. Application reserves the right to further address the comments of the Examiner at a later date if necessary.

Claim 4 and claim 10 depend on independent claims 1 and 8, respectively. As stated above, independent claims 1 and 8 are patentable over Havemann. Therefore, Applicant submits that that claims 4 and 10 are patentable over Havemann.

Applicant cannot find in Havemann a teaching or a suggestion of a barrier/adhesion layer that includes zirconium or hafnium as recited in amended claim 66. Therefore, Applicant submits that Havemann does not teach or suggest all the elements of claim 66 and that claim 66 is patentable over Havemann.

For at least reasons similar to those stated above for claim 66, independent claims 72 and 76 are patentable over Havemann. Further, Applicant submits that claims dependent from claims 66, 72, and 76 are patentable over Havemann for at least the reasons stated herein.

Applicant respectfully requests withdrawal of these rejections of claims 4, 10, and 66-70, and reconsideration and allowance of these claims.

Allowable Subject Matter

Claims 14-22, 29 and 36-65 were allowed. Applicant acknowledges allowance of these claims.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 371-2157 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

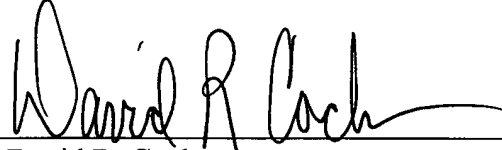
PAUL A. FARRAR

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 371-2157

Date 12 December 2006

By

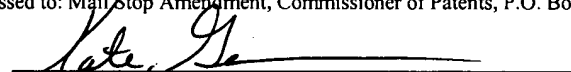


David R. Cochran
Reg. No. 46,632

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 12 day of December 2006.

KATE GANDON

Name



Signature